



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,454	03/10/2006	Thomas Peglow	Q90175	4642
23373 7590 07/22/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
WU, SHEAN CHIU				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
07/22/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com
PPROCESSING@SUGHRUE.COM
USPTO@SUGHRUE.COM

Office Action Summary

Application No.

10/550,454

Applicant(s)

PEGLOW ET AL.

Examiner

Shean C. Wu

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-17 and 19-54 is/are pending in the application.
- 4a) Of the above claim(s) 8, 16, 20-24 and 30-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 9-15, 17, 19 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1, 4-17 and 19-54 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second structure in proviso is vague because the compound is not covered by general formula I. See the groups P and P¹ in definition, which do not have a N(C₄H₉)₂.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

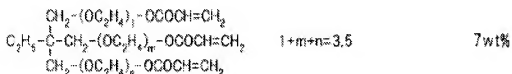
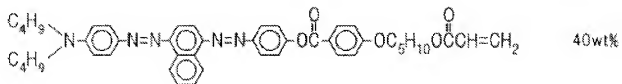
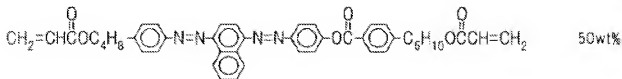
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-7, 9-15, 17, 19 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichihashi (JP 2001133630 or equivalent US 6,686,980).

The reference discloses an anisotropic film for use as polarization film of liquid crystal display element, is obtained by forming hard film by co-polymerization during which orientation of polymerizable dichromatic pigment is maintained. The reference anisotropic film is a hard film with maintaining the orientation of a polymerizable dichroic dye and forming a copolymer with other polymerizable monomer. The hard film is formed by coating a solution containing a polymerizable dichroic dye, other polymerizable monomer and a polymerization initiator. The coating solution contains in the ratio of from 50 to 95 wt % of a polymerizable dichroic dye, from 1 to 50 wt % of other polymerizable monomer, and from 0.5 to 5 wt % of a polymerization initiator (the components total up to 100 wt %). The polymerizable dichroic dyes which are used for forming an anisotropic film according to the present invention, those having polymerizable carbon-carbon unsaturated bonds at molecular terminals are preferably used. The polymerizable dichroic dyes may be any of an azo dye, an anthraquinone dye, and a benzoquinone dye. The compounds represented by the following formulae can be exemplified as the specific examples of the polymerizable dichroic dyes.

The reference further discloses the composition containing polymerizable dichroic azo dyes below (see example 3)

Composition 1 (for photo-orientation processing and multi-domain orientation processing)

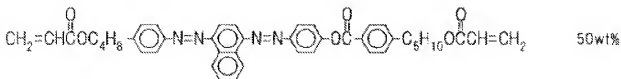


Irgacure - 907 (manufactured by Nippon Kayaku Co., Ltd.)
 3 wt%

The reference differs from the present claims in that the claimed polymerizable azo dye is excluded from the claims. However, the space groups S¹ and S² of the present dye are homologous to the butylene and pentylene groups of the reference dye; therefore, it would have been obvious to those skilled in the art to modify the length of carbon chain to arrive at the claimed invention.

5. Claim 29 is rejected under 35 U.S.C. 102(b) as anticipated by Ichihashi (JP 2001133630 or equivalent US 6,686,980).

The reference discloses a polymerizable dichroic azo dye in example 3



, which anticipates the claimed dye.

6. It is noted that claims 16 and 30 are not covered by elected species. The “E” group is only represented by formulae (b) and (c). Therefore, claims 16 and 30 are withdrawn as non-elected species.

Response to Arguments

7. Applicant's arguments, see remarks, filed 4/26/10, with respect to the rejections in the previous Office action have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, new grounds of rejection are made in the sections 1 and 4-5 cited above. Applicants argued in the previous office action dated 3/9/09 concerning the rejection over Ichihashi. Applicants argued that the compounds in the reference composition 1 are accidentally disclosed because there are not disclosed how these compounds are made. Applicant's attention is directed to the present specification, there is no teaching neither for the preparing the reference compound (first compound in the reference composition 1) but encompassed by the present formula IIIa. Also, the generic claims 1 and 29 are not allowable. Therefore the claims 8, 20-24 and 31-54 plus claims 16 and 30 discussed above are withdrawn from the consideration.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shean C. Wu whose telephone number is 571-272-1393. The examiner can normally be reached on 10:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kelly Cynthia can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shean C Wu/
Primary Examiner, Art Unit 1795

SCW